CENTER FOR DRUG EVALUATION AND RESEARCH

Application Number 21-304

CHEMISTRY REVIEW(S)

DIVISION OF ANTIVIRAL DRUG PRODUCTS

Review of Chemistry, Manufacturing and Controls

NDA #: 21-304

<u>CHEMISTRY REVIEW #</u>: 1 <u>DATE REVIEWED</u>: 3/16/2001

| SUBMISSION TYPE | DOCUMENT DATE | CDER DATE | <u>CONTENT</u> |
|-----------------|---------------|------------|---------------------|
| Original | 9 29/2000 | 10/2/2000 | CMC |
| Amendment | 11/16/2000 | 11/17/2000 | Master batch record |
| Amendment | 3/8/2001 | 3/9/2001 | Stability data |
| Amendment | 3/14/2001 | 3/15/2001 | CMC response |
| Amendment | 3/20/2001 | 3/21/2001 | CMC response |

NAME / ADDRESS OF APPLICANT: Roche Global Development

A Division of Syntex (U.S.A.) LLC

3401 Hillview Avenue Palo Alto, CA 94304

DRUG PRODUCT NAME

Proprietary: VALCYTETM

Nonproprietary: Valganciclovir Hydrochloride, Ganciclovir Valinate Hydrochloride

Code Name/#: 107-9070/194, RS-79070-194

CAS Registry#: 175865-59-5 (hydrochloride), 175865-60-8 (free base)

PHARMACOLOGICAL CATEGORY: Antiviral

INDICATION: Treatment of cytomegalovirus (CMV) retinitis

DOSAGE FORM/STRENGTH: Tablet/450 mg (free base)

ROUTE OF ADMINISTRATION: Oral

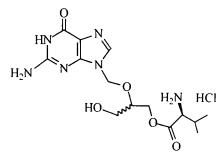
SPOTS: No

CHEMICAL NAME / STRUCTURAL FORMULA:

L-Valine, 2-[(amino-1,6-dihydro-6-oxo-9H-purin-9-yl)methoxy]-3-hydroxypropyl ester, monohydrochloride

9-[[2-Hydroxy-1-(hydroxymethyl)ethoxy]methyl]-guanine monoester with L-valine, monohydrochloride

Molecular formula: C₁₄H₂₂N₆O₅'HCl Relative molecular mass: 390.83



RELATED/SUPPORTING DOCUMENTS:

| DOCUMENT | APPLICATION NUMBER | DESCRIPTION |
|----------|-----------------------|--|
| NDA | 19-661 | Cytovene®-IV (ganciclovir sodium) Sterile Powder |
| NDA | 20-460 | Cytovene® (ganciclovir capsules) |

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RELATED DMF DOCUMENTS:

| | DMF | DMF | HOLDER | ITEM | CODE* | ACTION |
|---|----------|------|--------|------|-------|--------|
| | Number | Type | | REF | | |
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- * Action Codes for DMF Table:
- 1. DMF Reviewed. Other codes indicate why the DMF was not reviewed, as follows:
 - 2. Type I DMF
 - 3. Reviewed previously and no revision since review
 - 4. Sufficient information in application
 - 5. Authority to reference not granted
 - 6. DMF not available
 - 7. Other (explain under "Comments")

STATUS OF CONSULTS AND OTHER REVIEWS:

| ITEM | RECOMMENDATION | DATE | REVIEWER'S NAME |
|------------|------------------|----------|-----------------|
| Trademark: | Not recommended* | 1/5/2001 | OPDRA |
| | ': | | |
| | - | | |

^{*}The Division proposed Valcyte as trademark, which is accepted by the applicant.

FAX COMMUNICATION TO THE APPLICANT

| DATE | CONTENT |
|-----------|---|
| 3/5/2001 | Recommendations to revise the limit for individual impurity in drug |
| | substance and to revise the bottle label for drug product |
| 3/16/2001 | Request clarifications on proposed drug product specifications |

NDA 21-304

CONCLUSIONS & RECOMMENDATIONS:

| The NDA submission provides adequate information on the chemistry, manufacturing and controls |
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| to assure the identity, quality, purity and strength for VALCYTE TM tablets. The inspections of the |
| and manufacturing facilities have been completed and both were judged to have |
| acceptable cGMP status. Therefore, NDA 21-304 for VALCYTE TM (Valganciclovir HCl tablets), as |
| amended, is recommended for approval from the chemistry perspective. |

Concurrence:

HFD-530: Stephen P. Miller, Ph.D. (Signed Electronically) Chemistry Team Leader

APPEARS THIS WAY ON ORIGINAL

59 Pages have been redacted in full from this document

Reason: _____b(2) 'low' ____b(4) CCI ____b(4) TS ____b(5) Deliberative Process: Attorney Client and Attorney Work Product Privilege ____b(6) Personal Privacy ____b(7) Law Enforcement Records

